

Claims

- [c1] 1.A method of manufacturing a precision resistor on a substrate, said method comprising:
forming a first resistor having a first resistance value;
forming a second resistor having a second resistance value less than said first resistance value;
connecting said second resistor in series with said first resistor, wherein a total resistance of said first and second resistors falls outside a target resistance range; and
providing an electric current to said second resistor to change a dimension of said second resistor such that said total resistance falls within the target resistance range.
- [c2] 2.The method of Claim 1, wherein said total resistance of said first and second resistors is greater than said target resistance range.
- [c3] The method of Claim 1, wherein said first resistor is made of polysilicon and said second resistor is made of platable material.
- [c4] The method of Claim 1, wherein said first resistor is made of polysilicon and said second resistor is made of

thin copper wiring.

- [c5] The method of Claim 1, wherein said second resistor are electropolished at a rate that is inversely proportional to the resistance of said first resistor.
- [c6] 6. An apparatus for manufacturing a precision resistor on a substrate, said apparatus comprising:
 - means for forming a first resistor having a first resistance value;
 - means for forming a second resistor having a second resistance value less than said first resistance value;
 - means for connecting said second resistor in series with said first resistor, wherein a total resistance of said first and second resistors falls outside a target resistance range; and
 - means for providing an electric current to said second resistor to change a dimension of said second resistor such that said total resistance falls within the target resistance range.
- [c7] 7. The apparatus of Claim 1, wherein said total resistance of said first and second resistors is greater than said target resistance range.
- [c8] The apparatus of Claim 1, wherein said first resistor is made of polysilicon and said second resistor is made of

platable material.

- [c9] The apparatus of Claim 1, wherein said first resistor is made of polysilicon and said second resistor is made of thin copper wiring.
- [c10] The apparatus of Claim 1, wherein said second resistor are electropolished at a rate that is inversely proportional to the resistance of said first resistor.